IN THE ABSTRACT:

Based on In a test bench design consisting at least of an internal combustion engine (1) having its own sensor technology, actuator technology and control devices, a dynamometric brake (2), and a test bench computer (5) controlling the internal combustion engine (1) and the dynamometric brake (2), whereby the computer (5) calculates the control variables for the internal combustion engine (1) and the dynamometric brake (2) based on set point defaults, the object to operate the internal combustion engine (1) with the assistance of the dynamometric brake (2) in the same way as the engine would be operated by the user in a selected vehicle and with the driving profile to be set by the user is achieved in that by conducting a predefined measurement is conducted prior to the actual measurement, which cannot be performed precisely by the user himself. Based, and based on the measurement, parameters of a calculation specification (9) of set point defaults of the control variables are to be determined under consideration of the characteristics of the test bench and then set on the test bench computer (5) without changing the parameter setting of the test bench computer (5) or of the control device of the internal combustion engine, whereby the operational variables of the internal combustion engine (1) is monitored during the actual test run, and whereby the operational variables can be used for adaptation of the parameters of the set point calculation.